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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,657	05/25/2000	Misako Mizuno	029430-454	6902
21839	7590	10/16/2003	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P			KUBELIK, ANNE R	
POST OFFICE BOX 1404			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22313-1404			1638	

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	<b>Application No.</b> 09/577,657	<b>Applicant(s)</b> MIZUNO ET AL.	
	<b>Examiner</b> Anne R. Kubelik	<b>Art Unit</b> 1638	

--Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 September 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 29 and 34.

Claim(s) objected to: 31, 33, 36 and 38.

Claim(s) rejected: 30, 35 and 39-55.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☒ Other: See Continuation Sheet



**AMY J. NELSON, PH.D**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1600**

Continuation of 2. NOTE:

New issues: 112, 2nd: claims 30 and 35 are indefinite in their recitation of "homologous". How "homologous" differs from identity is unclear - is everything not an exact match excluded from homology or or certain mismatches considered homologous?

Continuation of 5. does NOT place the application in condition for allowance because:

Objection to claim 51: Applicant urges that the intention is to limit the claim to exclude plant cells and plant tissues. This is not found persuasive; it is suggested that the claim be amended to claim --the method of claim 49 wherein a whole plant is transformed--.

112, 1<sup>st</sup> enablement. Applicant urges that the claims have been amended to claim nucleic acids 90% homologous to SEQ ID NO:1 [sic]. This is not found persuasive. Claims 30 and 35 are drawn to a nucleic acid that is "90% homologous" to any nucleic acid encoding SEQ ID NO:1. As there are at least 2 codons encoding almost all amino acids, a nucleic acid encoding SEQ ID NO:1 can easily have only 67% identity to the nucleic acid taught by applicant, SEQ ID NO:2; thus a nucleic acid that is 90% homologous to any nucleic acid encoding SEQ ID NO:1 can be about 60% identical to SEQ ID NO:2. The specification does not teach such a nucleic acid. Applicant urges that one of skill in the art can make a nucleic acid comprising SEQ ID NO:2 or encoding SEQ ID NO:1 by adding a start codon to it. This is not found persuasive because the claims encompass nucleic acids in which such a start codon is missing, and thus these nucleic acids will not express the enzyme, particularly in plants, which cannot use GTG as a start codon.

112, 2<sup>nd</sup>, written description: Applicant urges that the claims have been amended to claim nucleic acids 90% homologous to SEQ ID NO: [sic]. This is not persuasive; the specification describes no nucleic acid with 90% homology to any nucleic acid encoding SEQ ID NO:1. See above also.

112, 2<sup>nd</sup>: Applicant urges that the nucleic acids of claims 29 and 34 comprise nucleotide sequences, thus providing antecedent basis for the limitation "the nucleotide sequence" in claims 30 and 35. This is not found persuasive because claims 29 and 34 are not drawn to nucleotide sequences but to isolated DNA or RNA molecules. It is suggested that "the nucleotide sequence" in claim 30 be replaced with --the DNA molecule-- and that claim 35 be similarly amended. Applicant urges that claim 51 has been amended. This is not found persuasive; the claim still lacks antecedent basis for the limitation "the transformed whole plant".

Continuation of 10. Other: The figure on Pg 2 of the substitute specification must be placed in a separate figure, not placed within the specification. See pg 3 of the Office action mailed 16 October 2001. The specification has not been entered.